

ABSTRACT

The present invention is a method of making a lithography photomask and photomask blank. The method of making the lithography photomask and photomask blank includes providing a silicon oxyfluoride glass tube having an OH content less than 50 ppm. The method further includes cutting the silicon oxyfluoride glass tube, flattening the silicon oxyfluoride glass tube, and forming the flattened cut silicon oxyfluoride glass tube into a photomask blank having a planar surface. The present invention includes a glass lithography mask preform. The glass lithography mask preform is a longitudinal silicon oxyfluoride glass tube that has an OH content ≤ 10 ppm, a F wt. % concentration ≥ 0.5 wt. %.